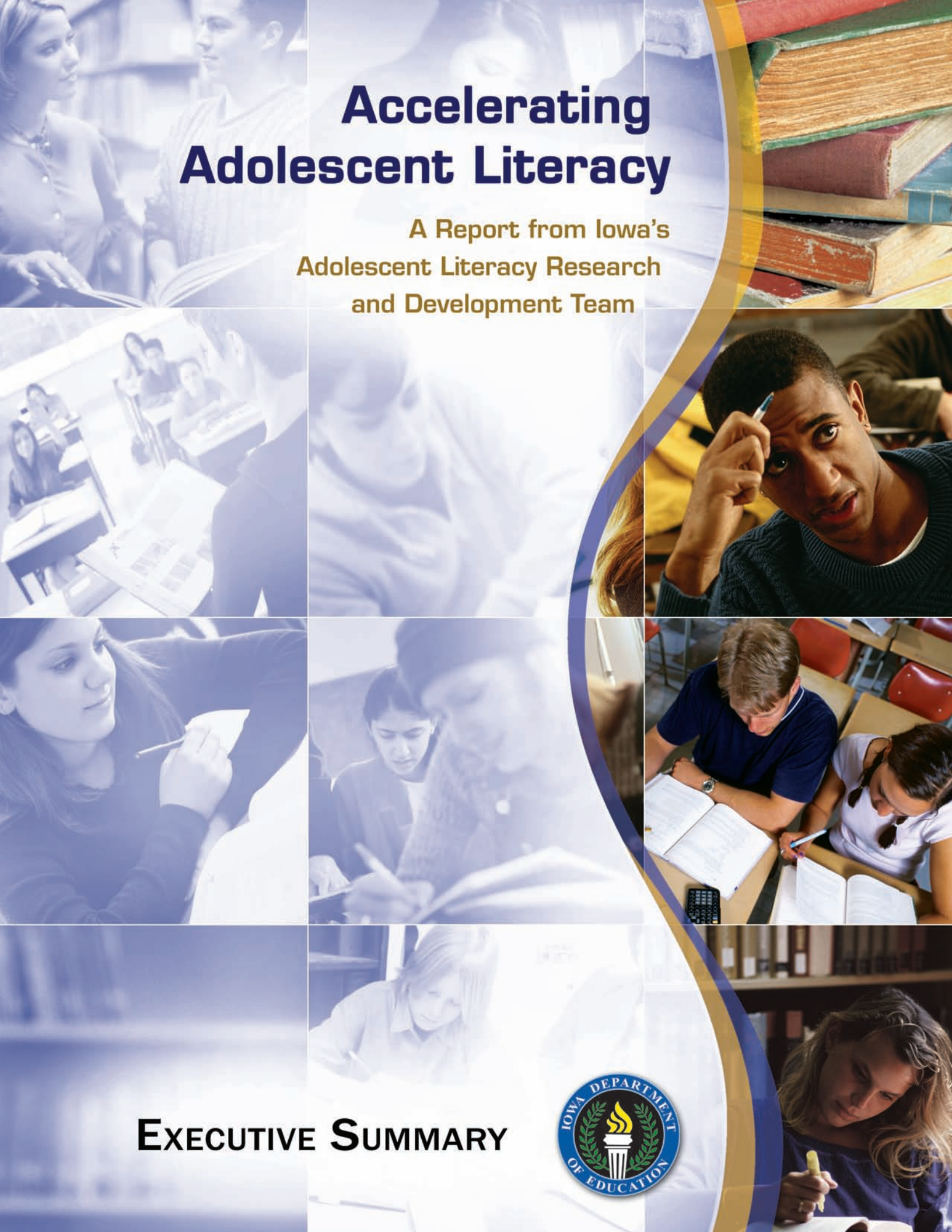

Accelerating Adolescent Literacy

A Report from Iowa's Adolescent Literacy Research and Development Team

Executive Summary

Accelerating Adolescent Literacy: A Report from Iowa's Adolescent Literacy Research and Development Team: Executive Summary

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Executive Summary

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Executive Summary

As a group, Iowa students continue to perform above the national averages on many indicators of achievement (Iowa Department of Education, 2006a). However, the same data suggest that achievement levels in literacy are not rising—and are even declining in relation to past performance and in relation to student performance in other states. This is occurring at a time when the average literacy required for U.S. occupations is rising rapidly. In an effort to address the needs of adolescents in Iowa, the Iowa Department of Education organized an Adolescent Literacy Research and Development Team (ALRDT) whose goals were threefold:

1. To form a cadre of people who would serve as a knowledgeable resource to Area Education Agencies (AEA) and Local Education Agencies (LEA)
2. To develop a proposed plan for building capacity statewide to improve adolescent literacy
3. To identify potential resource materials needed to support the capacity building efforts

This report documents the processes and outcomes associated with achieving these goals.

The Iowa Adolescent Literacy Research and Development Team

To meet the first goal, a 40-member team consisting of representatives of Iowa middle and high school educators and an external consultant met for 14 days between June 2006 and June 2007. The ALRDT studied and analyzed national, state, and local school/district achievement data,

examined research supporting effective practices in adolescent literacy and interviewed educational personnel in 36 middle and high schools in 23 local districts. The following definition of literacy was used as a guide:

> Literacy is the ability to read, write, speak, listen, view, and think effectively. It enables adolescents (students in grades four through twelve) to learn and communicate clearly about what they know and what they need to know. Being literate enables students to become informed, to inform others, and to make informed decisions. Because literacy is fundamental to teaching and learning, support for literacy development at the secondary level is one of the major keys to student success in the classroom and beyond. (Modified from Meltzer, Smith, & Clark, 2002)

The activities of the ALRDT increased the capacity of all members of the team to serve as resources in adolescent literacy. Team members used their prior experiences and their comprehensive knowledge base to develop a plan for building statewide capacity to improve adolescent literacy and to identify and prepare resource materials to support capacity-building efforts with their colleagues. The full report describes the activities of the ALRDT in greater detail and presents a synthesis of the research related to adolescent literacy and recommendations for school district leadership teams and faculties.

Building Capacity Statewide To Improve Adolescent Literacy: Goals for Students and Educators

Team members studied student performance results from the *Iowa Tests of Basic Skills* and the *Iowa Tests of Educational Development* for grades four, eight, and eleven; results for Iowa students from the *National Assessment of Educational Progress* for grades four and eight; and results from the *ACT* for Iowa's graduates. They analyzed locally-adopted textbooks, *Iowa's Core Curriculum*, and released-items from various assessment measures to determine the knowledge, skills, and strategies needed to learn from these documents and perform well on these measures. And, between July and December 2006, team members interviewed 198 middle and high school faculty members to gather their ideas about student and staff goals. Interviews were conducted in 36 schools within 23 school

Students expand their range when applying literacy skills to a variety of content areas because the academic discourses and disciplinary concepts in those require different approaches to reading, writing, speaking, viewing, and listening. It is through applying literacy skills in a number of content areas that students learn to integrate these skills into life experience. (Iowa Department of Education, 2006b, p. 26)

districts with:

- 45 middle school teachers
- 65 high school teachers
- 29 guidance counselors
- 24 teacher librarians
- 15 middle school principals
- 20 high school principals (includes administrators of grade seven through twelve schools, and one pre-K through twelve facility)

Here are the most frequently identified goals and actions for students and educators.

Students

Performance. From the data gathering and analyses described above, the ALRDT identified the following literacy performance goals for students:

1. Become avid readers who read for a wide variety of purposes and are inquisitive, thoughtful, and reflective
2. Use comprehension strategies and skills to understand a wide range of both fiction and nonfiction materials, including informational literacy
3. Use critical thinking and problem solving skills
4. Demonstrate vocabulary knowledge in speaking and writing
5. Communicate articulately and effectively when speaking and writing
6. Use discussion and writing as tools to support learning

Attitudes. The following attitudinal goals were identified by the ALRDT from studying the interview data. Educators interviewed mentioned these items frequently:

1. A life-long love of learning
2. Persistence in task completion
3. Positive habits of mind and willingness to work with others
4. Positive attitudes toward reading and writing

Teachers, Teacher Librarians, and/or Guidance Counselors

The following list addresses goals and actions developed from studying the documents identified in the report and from studying interviewee responses by role group.

1. Provide access to print for students in a wide variety of genres in both classroom and school libraries by continuing to update school media centers with a wide variety of fiction and nonfiction materials, accessing lists available from the National Science

Teachers Association, the National Social Studies Council, the National Council of the Teachers of English, the International Reading Association, and other sources that provide lists of content area books
2. Provide Content Area Read-Alouds that help students build vocabulary and curriculum concepts
3. Provide time for students to read for a wide variety of purposes during the school day from nonfiction and fiction materials
4. Provide explicit strategy instruction in reading and writing strategies for students in all content areas
5. Develop and implement interdisciplinary inquiry units to increase student engagement and motivation
6. Use a variety of approaches in teaching, including participatory and transmission approaches
7. Continue to develop disciplinary expertise and depth of knowledge in their content area and in effective pedagogy
8. Understand both the domain-specific strategies and the general strategies required for students to navigate texts
9. Model and provide support to students so they can develop task persistence and experience success with literacy tasks
10. Provide students with an opportunity to discuss their findings with peers and engage in problem solving critical to success in the world of work

Provide access to print for students in a wide variety of genres in both classroom and school libraries by continuing to update school media centers with a wide variety of fiction and nonfiction materials...

School-based Administrators, District Office Personnel, Superintendents and School-Board Members, AEA Consultants, Supervisors and Directors, and Department of Education Personnel

These additional goals and actions are recommended:

1. Provide financial support to allow students to access a wide variety of print in both classroom libraries and school libraries
2. Support classroom teachers as they develop an understanding of the research base for adolescent literacy
3. Understand the reciprocity between learning to read and reading to learn and support teachers in this understanding
4. Provide classroom teachers with, and participate with them, in quality professional development in the area of adolescent literacy, pedagogy, and content knowledge using the Iowa Professional Development Model
5. Provide opportunities for classroom teachers to engage in

discussion about domain specific and content specific knowledge needed by students
6. Encourage and support teachers to develop and implement interdisciplinary inquiry units
7. Develop a culture of literacy within the school that supports and encourages teacher and student engagement in literacy activities
8. Communicate with stakeholders to provide an understanding of the need for accelerating adolescent literacy skills to meet the demands of the 21st century

…accelerating adolescent literacy skills to meet the demands of the 21st century…

What Aspects of Literacy Were Studied?

The ALRDT defined literacy broadly as "the ability to read, write, speak, listen, view, and think effectively" and the population of adolescents to support as "students in grades four through twelve." Analyzing the complete knowledge base and making recommendations to improve all of these abilities for all adolescents is beyond the expertise of the team and beyond the scope of this document. Instead, what the team did was focus on academic literacy—especially reading and writing to learn in grades four through twelve—with discussion, listening, viewing, and thinking addressed as tools in support of learning.

Six strands of study formed the academic literacy curriculum content:

- The role of reading volume and access to print in accelerating adolescent literacy
- Vocabulary knowledge and vocabulary development
- Reading fluency
- Reading comprehension
- Discussion
- Writing

The team focused on academic literacy—especially reading and writing to learn in grades four through twelve—with discussion, listening, viewing, and thinking addressed as tools in support of learning.

These six strands were identified by the external consultant to the team. They include as many or more literacy strands than most textbooks that address adolescent literacy and content area literacy (e.g., Alvermann & Phelps, 2005; Daniels & Zemelman, 2004; Fisher & Frey, 2004; Vacca & Vacca, 2005; Worthy, Broaddus, & Ivey, 2001). They also include three of the five components from the *Report of the National Reading Panel: Teaching Children to Read* (National Reading Panel, 2000). Phonemic awareness and phonics were

not addressed as a major curriculum strand for adolescents because very few are struggling with phonological processing; and most disabled high school readers have the phonological processing skills of average, proficient fifth graders (Curtis, 2004; Torgesen & Hudson, 2006; Torgesen, et al, 2007).

The following are definitions and highlights from the strands studied.

Reading Volume

Reading volume refers to the quantity of materials that students read and to the amount of time students spend reading. Major published studies that address reading volume have two common findings: 1) students who read more have higher reading achievement results, and 2) most students report very little reading in or out of school (Allington, 2001; Anderson, 1996; Anderson, Wilson, & Fielding, 1988; Cipielewski & Stanovich, 1992; Cunningham, 2005; Foertsch, 1992; Joyce & Wolf, 1996; Kirsch et al., 2002; Taylor, Frye, & Maruyama, 1990).

Members of the ALRDT consolidated the implications of their work into the following statement:

> *Encouraging students to read in and out of school, providing students access to a variety of texts for recreational reading and for learning in the content areas, providing opportunity to read during every school day (either print or electronic text), and providing Content Area Read-Alouds help build vocabulary, fluency, skill in writing, knowledge of language structures, knowledge of how language works in print, and knowledge in the content area*.

Colleagues are encouraged to think about how reading volume and reading to learn in the content areas are supported in their settings.

The ALRDT recommends that teachers and those who support them gather local data in the following areas and compare their findings to those in the Reading Volume strand of this report and determine if changes need to be made in their setting:

1. The diversity of texts in all classrooms
2. The level of reading volume among students
3. The number of opportunities students have to read during the school day
4. The extent to which informal and formative assessments are used to determine whether students are reading and learning from reading
5. The extent to which Read-Alouds are used by teachers across content areas and the quality in terms of text selected, curriculum appropriateness, lesson integration, and opportunities for student

discussion and follow-up
6. The extent to which Content Area Read-Alouds are used to give struggling readers—i.e., non-readers through grade three, English language learners—access to information contained in text that is written above their lexile levels

If changes are needed to improve students' access to and opportunities to read, here are a few recommended actions:

1. Revise curriculum to include reading to learn and the need for students to read a variety of materials more closely linked to life outside of school.
2. Revise core curriculum in each content area to focus on depth and breadth of knowledge around the core concepts of that area and ask that these core concepts be used by teachers, librarians, and administrators to purchase books and resources.
3. Strengthen techniques for gathering information about students' engagement in reading in order to provide directions for action.
4. Teach students strategies for selecting books; routines for settling down to read and staying focused; and strategies to help them learn from reading such as re-reading and summarizing. Teachers also need to demonstrate and provide opportunities for students to share, respond to, and apply what they read.
5. Provide professional development to teachers to locate, select, and use a wide range of diverse materials in their classrooms and instruction.
6. Evaluate the quality of reading materials and evidence of effective methods of increasing student engagement in reading.
7. Secure an adequate budget to increase classroom collections, continue to build quality central library collections, and enable easy access to electronic texts in every classroom.

Vocabulary

Vocabulary refers to the words we must know to communicate effectively. The "average" student graduating from high school is estimated to know approximately 40,000 words (Nagy & Herman, 1985, cited in Cunningham, 2005). Yet, researchers have found students need a vocabulary of approximately 88,500 words to meet the demands of higher academic settings (Nagy & Anderson, 1984).

Members of the ALRDT consolidated the implications of their work into the following statement:

> *Multiple actions need to be pursued simultaneously to help all students expand their vocabularies and their vocabulary-building strategies. These actions include providing support and*

opportunities for wide reading in order to build a large sight vocabulary for reading and an expressive vocabulary for writing; providing Content Area Read-Alouds to help build vocabulary and knowledge in the content area; direct teaching of a limited number of key concept words; student involvement in discussing, assessing, and consciously building their vocabularies for reading and writing; and the use of explicit strategy instruction for teaching students vocabulary building strategies.

The team offers the following additional recommendations:

1. *Enriched language environments*: Students should be given ample opportunities to discuss content with peers and their teachers—who both guide and collaborate with students in the learning process.
2. *Ensure there are a variety of books at a range of reading levels in each classroom so that all students can learn from reading*. Are there books in other languages for English language learners to enjoy and use as tools for learning? Are the materials in classrooms and the school library at a wide range of reading levels so that most special education students and other students at risk of academic failure can participate in the literate community? The variety of texts helps address the needs of ELL, SPED, students-at-risk of academic failure, and gifted and talented students.
3. *Generative word knowledge*: An equally essential component that emphasizes the importance of learning new words from a variety of sources and includes instruction in strategies for dealing with words students encounter independently. Vocabulary instruction for adolescent learners should include word study activities to increase student knowledge of root words, their derivation and meaning, as well as the meaning of common affixes. Instructional practices that help students build generative word knowledge include explicit strategy instruction to provide them with a toolkit of strategies for tackling unfamiliar words.
4. *Curriculum and assessment*: Faculties should develop and implement a comprehensive, integrated, school-wide approach to vocabulary learning.

Fluency

Fluency is the ability to read and comprehend text quickly, accurately, and with proper expression (National Reading Panel, 2000; Pikulski, 2006). Data indicate that fluency may be a problem for struggling adolescent readers. Difficulties in reading fluency can be caused by a number of factors including deficiencies in accurate reading practices and inadequate

vocabularies (Torgesen & Hudson, 2006).

When considering the evidence related to the role of fluency in a comprehensive literacy program for adolescent learners, a number of actions must be considered. Members of the ALRDT consolidated the implications of their work into the following statement:

> *For those students who are making adequate progress in the area of fluency, simply keeping them moving with vocabulary development and emphasizing wider reading will suffice. It is important for teachers and leaders to have conversations as to how these practices are supporting students' learning from and with print. Students who are not making adequate progress in fluency may need direct instruction in decoding strategies, more opportunities for reading, opportunities for repeated reading, and guided oral reading.*

Reading Comprehension

Comprehension is a process in which the reader constructs meaning from and interacts with text in a purposeful and active manner (Harris & Hodges, 1995; RAND Study Group, 2002). It is a multifaceted cognitive process that includes many elements: the reader and all the knowledge and experiences he or she brings to the act of reading the text, printed or digital, and all the cognitive processes the reader applies while interacting with and reflecting on text, as well as the quality, density, and nature of ideas presented by the author of the text. Highly skillful readers use text and apply comprehension processes and strategies fluidly: they read with purpose, which may be pleasure, learning new information, or a combination; they have a toolkit of cognitive strategies and routines to help them if they have difficulty understanding the text; and they have a sense of efficacy from reading, i.e., they know they will gain knowledge or experiences from their reading. For some students the use of reading comprehension strategies comes easily and continues to develop steadily as they mature. Many other students do not apply these strategies nor are they aware they need to.

Much of the research on reading comprehension has been designed to identify how proficient readers construct meaning from text (Nokes & Dole, 2004; Pearson, Roehler, Dole, & Duffy, 1991; Pressley & Afflerbach, 1995). Proficient readers

- activate and use relevant prior knowledge to make sense of text;
- monitor their comprehension as they read and repair comprehension when it breaks down;
- determine the most important information in a text passage;
- attempt to synthesize information across large pieces of text;
- make inferences;

- continuously ask questions as they read.

The explicitness with which these cognitive strategies are taught makes a difference in learner outcomes, especially for low achieving students (Rand Reading Study Group, 2002). When readers are given explicit instruction in the use of cognitive strategies, they make significant gains on measures of reading comprehension over students taught with conventional instructional procedures (Pressley et al., 1992; Rosenshine & Meister, 1994; Sweet & Snow, 2003).

Although most content area teachers do not consider themselves to be reading or literacy teachers, they are the best resource to provide instruction on the cognitive strategies appropriate for understanding their content areas. Each content area and academic domain has specific literacy processes and skills that are integral to successful learning. Each content area teacher has an understanding of the thinking processes and strategies that are necessary for success in his or her content. In other words, they have metacognitive understanding—the ability to "think about and control their own learning"—of the strategies necessary for success with their content (Vacca & Vacca, 2005). Their greatest challenge may be designing curriculum and instruction that both teaches and engages students with the cognitive processes inherent to their success in content-dense academic materials.

Although most content area teachers do not consider themselves to be reading or literacy teachers, they are the best resource to provide instruction on the cognitive strategies appropriate for understanding their content areas.

Members of the ALRDT recommend that responsible parties consider how the following approaches are being used in their settings:

> *Explicit strategy instruction in reading comprehension, multiple opportunities to practice reading strategies across all content areas, and time for discussion and writing to support understanding and learning from texts. Along with these specific supports for reading comprehension, are students reading widely in their content areas to build vocabulary and knowledge, do they have ample opportunities to participate in teacher-facilitated discussions, and do they have ample opportunities to collaborate in inquiry-oriented projects that include writing about their learning?*

Discussion

Discussions are defined as "*thoughtful and sustained examination of a given topic over a period of time involving substantial contributions and reflections by both teacher and students*" (Nystrand & Gamoran, 1993, p.

99). They are characterized by relatively few questions—and most of those are focused on clarifying or elaborating ideas, not on quizzing for a pre-determined answer—with students and the teacher taking up or building on each others' ideas and perspectives. In many middle and high school classrooms, there are few opportunities for such discussions (Alverman, 2002; Alvermann, O'Brien, & Dillon, 1990; Goodlad, 1984; Webb, Nemer, & Ing, 2006).

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While research focusing on the development and use of discussion is limited, the knowledge base is growing. In studies conducted by Applebee and his colleagues, classroom interactions significantly related to improved student performance featured more time for discussion, use of questions that moved discussion forward instead of testing what students know, fluid verbal interchanges in which teachers' questions built on or extended student comments, higher academic expectations of students, overt teaching of knowledge and strategies needed for successful participation in reading, writing, and discussion, (Applebee, Langer, Nystrand, & Gamoran, 2003; Langer, 2000, 2001; Nystrand, 1997).

Members of the ALRDT consolidated the implications of their work into the following statement:

> *Discussion is an important communication skill; it supports the development of higher level reading and writing skills; and it is a scaffold for learning across the content areas*.

They offer the following recommendations to put this into action:

Teachers and those who support them need to

a. examine the use of discussion in classrooms, compare their local data to the findings and implications of the research, and make needed changes to facilitate student learning;
b. focus on depth of knowledge. *Iowa's Core Curriculum* provides a good resource to school faculties who wish to re-examine their curriculum in this fashion;
c. use teaching strategies that integrate reading, writing, and discussion as tools for learning in the content areas, not just in English classes;
d. provide professional development and support to teachers for incorporating more discussion-based approaches into their instructional repertoire.

Learning to Write and Writing to Learn

Writing is recording ideas in a language that can be retrieved by the writer and others. It involves an audience, which may simply be the writer or the writer and the teacher; the goals or purpose for recording ideas, thoughts, emotions; application of knowledge of the language being used and how it works (letter symbols, conventional spellings, word order, usage and mechanics, ways of recording, and forms/genre of recording); and knowledge about the topic or purpose for writing or willingness to gain this knowledge, possibly with the help of the text one writes while exploring a topic (Calhoun, 2007).

Nationally, many students are not writing much for any of their academic subjects, including English. Approximately two-thirds of students in grade eight spend an hour or less on writing for homework each week, and approximately two-fifths of grade twelve students report "never" or "hardly ever" being asked to write a paper of three pages or more (Applebee & Langer, 2006).

A review of the literature on writing revealed a number of principles of good writing instruction (Graham & Perin, 2007; NCTE, 2004). To become better writers students need to

1. practice writing;
2. reflect on collections of their own writing over time;
3. discuss their ideas with peers and engage in conversations with teachers about their writing;
4. have opportunities to write using process approaches;
5. be supported in the various writing activities that occur outside of the school context;
6. be given opportunities to develop flexibility in their writing—allowing them to learn to adapt writing formats and purposes to fit the needs of many different contexts;
7. have practice in a variety of genres—exposition, narration, persuasion, folk tales, poetry, and more.

A review of the literature also identified explicit teaching strategies for planning, composing, revising, and editing writing and the role of grammar and mechanics in a quality writing curriculum. However, direct instruction of grammar with a focus on rules instead of content and on writing processes such as the five paragraph essay have little or no positive impact on writing development (Graham & Perin, 2007; Hillocks, 1986, 1995, 2005).

Effective curriculum and instructional practices that improve student writing and learning in the content areas include

1. frequent learning opportunities using writing. Inquiry and writing

to learn techniques can be used by every content area teacher;
2. opportunities to study models (examples of writing);
3. extensive and varied reading experiences both in and out of school to support the development of writing craft and a more solid knowledge base for writing content;
4. opportunities for collaborative writing, which uses instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions;
5. techniques for and opportunities to summarize information from single and multiple sources;

Members of the ALRDT consolidated the implications of their work into the following statement:

> *Many school and district faculties need to identify the strategies being used to teach grade four through twelve students how to write and how to learn from writing and then compare their current curriculum and instruction to the promising approaches described in the Writing strand of the report. Where they find considerable discrepancies, changes in curriculum and instruction need to be made*.

Actions that many school faculties may find informative and productive:

1. Determine how and where writing quality is addressed
2. Determine how writing to learn is used across all content areas
3. Provide professional development and support to language arts and English teachers in expanding their range of instructional strategies
4. Provide professional development and support to teachers in all content areas in expanding the use of questioning techniques and discussion strategies; develop a range of writing prompts that lead students to engage in applying declarative, procedural, and conditional knowledge; provide more modeling of how skilled persons present information in the content area and how they build and share knowledge in their content area

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Struggling Readers and Writers

There is converging evidence that 90% of struggling readers and writers can be helped significantly and that what works for proficient readers also

works for struggling readers, including most learning disabled students and many special education students (Gersten, Fuchs, Williams, & Baker, 2001; Graham & Perin, 2007; Ivey & Broaddus, 2007; Sturomski, 1997; Torgesen, et al, 2007; Troia, 2006).

These students need

- opportunities to read books at a range of reading levels and interests, trade books that teach content area concepts; and access and instruction in using electronic print resources;
- many opportunities to write and to have explicit strategy instruction in writing;
- explicit strategy instruction in vocabulary building within the content areas;
- opportunities to discuss what they are reading and writing;
- instruction in reading comprehension strategies within the content areas, especially explicit strategy instruction and metacognitive strategies that help them learn from and apply the content.

Torgesen and his colleagues (2007) state that

> ...with the exception of instruction to increase reading accuracy and fluency, the content of effective literacy instruction for students reading below grade level is very similar to that recommended for students reading at grade level and above. As with students reading at grade level, general recommendations include instruction to help students apply reading comprehension strategies more effectively before, during, and after reading, instruction to increase the breadth and depth of vocabulary knowledge, instruction, and assignments that are motivating and engaging, and instruction that improves knowledge of content-area concepts and facts. (p. 89)

Irvin, Buehl, and Radcliffe (2007), citing the work of Torgesen and colleagues above, state

> The implication of this research is that by having all content teachers take responsibility for helping students to become more literate in their content areas, 90 percent of struggling readers can be helped significantly. What is necessary, however, is a total school commitment to literacy improvement. (p. 66)

Organizational Supports Needed for Accelerating Literacy Development

From studying about the organizational supports needed for accelerating adolescent literacy in middle and high schools in Iowa, the ALRDT

recognized that "...changing the core processes of school requires an explicit theory of how teachers learn to teach and a translation of that theory into constructive actions in school systems and schools" (Elmore, 2007, pp. 195–196). They identified and defined four organizational components as essential to success in their effort: leadership, professional development, capacity building, and sustainability. Each is addressed in the report section entitled: Organizational Supports Needed for Accelerating Literacy. In the recommendations included in this section of the report, the ALRDT proposes four questions for faculties and district personnel to address in their work to accelerate literacy development for all the students they serve.

1. How is knowledgeable, distributed leadership being built and expanded?
2. Is professional development content carefully selected based on a study of student knowledge and performance in one or more strands of literacy development and a careful study of promising practices?
3. How effectively is the Iowa Professional Development Model being used to structure collective staff development and collaborative work time?
4. If there is a schoolwide literacy initiative or focus already in place, are there plans for it to continue until students and staff have learned its content? Are both implementation and student effects being continuously studied?

Resource Materials to Support Capacity Building Efforts

Members of the ALRDT are preparing resource materials to support efforts to accelerate literacy achievement. A major resource, of course, is the report and its six sections on literacy. The ALRDT is also working on a professional development series. Part One of the Adolescent Literacy Professional Development Series provides four units:

- Unit 1: Inquiry into the Current Status of Adolescent Literacy
- Unit 2: Reading Volume
- Unit 3: Content Area Read-Alouds
- Unit 4: Access to Print

These professional development materials will be completed by the end of 2007 and are for use by AEA consultants, school central office staff, and school leadership teams in supporting the study of adolescent literacy. The completion of Professional Development Series Two—entitled Explicit Strategy Instruction for Vocabulary, Reading Comprehension, and Writing—is targeted for June 2008.

Closing Comments

The work to improve adolescent literacy requires more focus, more sustained effort, greater attention to the core processes of instruction, and more resources and support for teachers and students than presently exist in most of Iowa's secondary schools. However, with distributed leadership, a focused vision for improvement in adolescent literacy, and ongoing professional development, strong instructional innovations can be implemented and sustained in all schools and districts willing to undertake the work. This report is designed to provide Iowa's educators with a resource they can use to help them move forward in accelerating the literacy development of all students grades four through twelve.

References

Allington, R. L. (2001). *What really matters for struggling readers: Designing research-based programs*. New York: Longman.

Alvermann, D. E. (2002). Effective literacy instruction for adolescents. *Journal of Literacy Research, 34*(2), 189–208.

Alvermann, D. E., O'Brien, D. G., & Dillon, D. R. (1990). What teachers do when they say they're having discussion of content area reading assignments: A qualitative analysis. *Reading Research Quarterly, 25*(4), 296–322.

Alvermann, D. E., & Phelps, S. F. (2005). *Content area reading and literacy: Succeeding in today's diverse classrooms* (4th ed.). Boston, MA: Pearson.

Anderson, R. C. (1996). *Research foundations to support wide reading*. Publication of the Center for the Study of Reading, Technical Report No. 631. Champaign, IL: University of Illinois at Urbana-Champaign.

Anderson, R. C., Wilson, P. T., & Fielding, L. G. (1988) Growth in reading and how children spend their time outside of school. *Reading Research Quarterly, 23*, 285–303.

Applebee, A. N., & Langer, J. A. (2006). *The state of writing instruction in America's schools: What existing data tell us*. Albany, NY: Center on English Learning and Achievement.

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal, 40*(3), 685–730.

Calhoun, E. F. (2007). *Learning to write—writing to learn*. St. Simons Island, GA: Phoenix Alliance.

Cipielewski, J., &. Stanovich, K. E. (1992). Predicting growth in reading ability from children's exposure to print. *Journal of Experimental Child Psychology, 54*, 74–89.

Cunningham, A. E. (2005). Vocabulary growth through independent reading and reading aloud to children. In E. H. Hiebert & M. L. Kamil (Eds.), *Teaching and learning vocabulary* (pp. 45–68). Mahwah, NJ: Erlbaum.

Curtis, M. E. (2004). Adolescents who struggle with word identification: Research and practice. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 119–134). New York: Guilford.

Daniels, H., & Zemelman, S. (2004). *Subjects matter: Every teacher's guide to content-area reading*. Portsmouth, NH: Heinemann.

Fisher, D., & Frey, N. (2007). *Improving adolescent literacy: Content area strategies at work* (2nd Ed.). Upper Saddle River, NJ: Prentice Hall.

Foertsch, M. (1992). *Reading in and out of school*. Washington, DC: U.S. Department of Education.

Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of the research. *Review of Educational Research, 71*(2), 279–320.

Goodlad, J. I. (1984). *A place called school*. New York: McGraw-Hill.

Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools—A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.

Harris, T. L., & Hodges, R. E. (Eds.). (1995). *The literacy dictionary: The vocabulary of reading and writing*. Newark, DE: International Reading Association.

Hillocks, G., Jr. (1986). *Research on written composition: New directions for teaching*. Urbana, IL. National Conference on Research in English.

Hillocks, G., Jr. (1995). *Teaching writing as reflective practice*. New York: Teachers College Press.

Hillocks, G., Jr. (2005). The focus on form vs. content in teaching writing. *Research in the Teaching of English, 40*(2), 238–248.

Iowa Department of Education. (2006a). *The annual condition of education report*. Des Moines, IA: Author.

Iowa Department of Education. (2006b). *Model core curriculum for Iowa high schools: Final report to the State Board of Education*. Des Moines, IA: Author.

Irvin, J. L., Buehl, D.R., & Radcliffe, B. (2007). *Strategies to enhance literacy and learning in middle school content area classrooms* (3rd ed.). New York: Pearson Education.

Ivey, G., & Broaddus, K. (2007, October/November/December). A formative experiment investigating literacy engagement among adolescent latina/o students just beginning to read, write, and speak english. *Reading Research Quarterly, 42*(4), 512–545.

Joyce, B. R., & Wolf, J. M. (1996). Readersville: Building a culture of readers and writers. In B. R. Joyce & E. F. Calhoun (Eds.), *Learning experiences in school renewal: An exploration of five successful programs* (pp. 95–115). Eugene, OR: ERIC Clearinghouse on Educational Management.

Kirsch, I., de Jong, J., Lafontaine, D., McQueen, J., Mendelovits, J., & Monseur, C. (2002). *Reading for change: Performance and engagement across countries. Results from PISA 2000*. Paris, France: Center for Educational Research, Organisation for Economic Co-operation and Development.

Langer, J. A. (2000). Excellence in English in middle and high school: How teachers' professional lives support student achievement. *American Educational Research Journal, 37*(2), 397–439.

Langer, J. A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal, 38*(4), 837–880.

Meltzer, J. (with Smith, N., & Clark, H.). (2002). *Adolescent literacy resources: Linking research and practice*. Providence, RI: Northeast and Islands Regional Educational Laboratory at Brown University.

Nagy, W. E., & Anderson, R. C. (1984). How many words are there in printed school English? *Reading Research Quarterly, 19*, 303–330.

National Council of Teachers of English. (2004). *Framing statements on assessment*. Retrieved May 7, 2007 from http://www.ncte.org/about/over/positions/category/assess/118875.htm

National Reading Panel. (2000). *Report of the national reading panel: Teaching children to read*: *Reports of the subgroups*. National Institute of Child Health and Human Development. NIH Pub. No. 00-4754.

Nokes, J. D., & Dole, J. A. (2004). Helping adolescent readers through explicit instruction. In T. L. Jetton, & J. A. Dole (Eds.), *Adolescent literacy: Research and practice* (pp. 162–192). New York: Guilford.

Nystrand, M., & Gamoran, A. (1993). From discourse communities to interpretive communities. In G. E. Newell & R. K. Durst (Eds.), *Exploring texts: The role of discussion and writing in the teaching and learning of literature* (pp. 91–111). Norwood, MA: Christopher-Gordon.

Pearson, P. D., Roehler, L. R., Dole, J. A., & Duffy, G. G. (1992). Developing expertise in reading comprehension. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction* (2nd ed., pp. 145–199). Newark, DE: International Reading Association.

Pikulski, J. (2006). Fluency: A developmental and language perspective. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about fluency instruction* (pp. 70–93). Newark, DE: International Reading Association.

Pressley, M., & Afflerbach, P. (1995). *Verbal protocals of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Erlbaum.

Pressley, M., El-Dinary, P. B., Gaskins, I., Schuder, T., Bergman, J. L., Almasi, J., & Brown, R. (1992). Beyond direct explanation: Instruction of reading comprehension strategies. *The Elementary School Journal, 92*(5), 513–555.

RAND Reading Study Group. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: Science and Technology Policy Institute, RAND Education.

Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*(4), 479–530.

Sturomski, N. (1997). *Teaching students with learning disabilities to use learning strategies*. NICHY News Digest, 25. Retrieved October 22, 2007 from http://www.nichcy.org/pubs/newsdig/nd25txt.htm

Sweet, A., & Snow, C. (Eds.) (2003). *Rethinking reading comprehension*. New York: Guilford Press.

Taylor, B. M., Frye, B. J., & Maruyama, G. M. (1990). Time spent reading and reading growth. *American Educational Research Journal, 27*(2), 351–362.

Torgesen, J. K. & Hudson, R. F. (2006). Reading fluency: Critical issues for struggling readers. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about fluency instruction* (pp. 130–158). Newark, DE: International Reading Association.

Torgesen, J. K., Houston, D. D., Rissman, L. M., Decker, S. M., Roberts, G., Vaughn, S., et al. (2007). *Academic literacy instruction for adolescents: A guidance document from the Center on Instruction*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.

Troia, G. A. (2006). Writing instruction for students with learning disabilities. In C. A. MacArthur, S. Graham, & J. Fitzgerald, (Eds.), *Handbook of writing research* (pp. 324–336). New York: Guilford.

Vacca, R. T., & Vacca, J. A. L. (2005). *Content area reading: Literacy and learning across the curriculum* (8th ed.). Boston: Pearson/Allyn and Bacon.

Webb, N. M., Nemer, K. M., & Ing, M. (2006). Small-group reflections: Parallels between teacher discourse and student behavior in peer-directed groups. *Journal of the Learning Sciences, 15*(1), 63–119.

Worthy, J., Broaddus, K., & Ivey, G. (2001). *Pathways to independence: Reading, writing, and learning in grades 3–8*. New York: Guilford.